

## **RAW SEQUENCE LISTING**

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Application Serial Number: 10/642,272 A  
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DATE: 08/29/2005

PATENT APPLICATION: US/10/642,272A

TIME: 17:51:16

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Output Set: N:\CRF4\08292005\J642272A.raw

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3 <110> APPLICANT: Hattori, Fumiyuki
4     Sugimura, Keijiro
5     Furuya, Mayumi
7 <120> TITLE OF INVENTION: Therapeutic Methods and Agents for Diseases Associated with
8     Decreased Expression of AOP-1 Gene or AOP-1
10 <130> FILE REFERENCE: 58777.000012
12 <140> CURRENT APPLICATION NUMBER: 10/642,272A
13 <141> CURRENT FILING DATE: 2003-08-18
15 <150> PRIOR APPLICATION NUMBER: PCT/JP02/01358
16 <151> PRIOR FILING DATE: 2001-02-18
18 <150> PRIOR APPLICATION NUMBER: JP 41003/2001
19 <151> PRIOR FILING DATE: 2001-02-16
21 <160> NUMBER OF SEQ ID NOS: 30
23 <170> SOFTWARE: PatentIn version 3.3
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26 <211> LENGTH: 1542
27 <212> TYPE: DNA
28 <213> ORGANISM: Homo sapiens
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35 agcttgacaa atttattgtg ttctgggttc agtcaagcaa aattattcag caccagttcc      180
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98 ccattttaaa ggtactgctg ttgtcaatgg agagttcaaa gagctgagtc tgcacgactt 300
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142 <213> ORGANISM: Mus sp.
144 <400> SEQUENCE: 3
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149 ctgcctcaac agttcttagg cctgttgctt ctagaagaac ctgtttgaca gacatactgt 180
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153 ctgtcaccca gcacgcgcc tattttaaag gtactgctgt tgtcaatgga gagttcaag 300
155 agctgagctc cgacgacttt aagggaat acttggtgct tttcttctac cctttggatt 360
157 tcacatttgt gtgtcctaca gaaattgttg ctttcagtga caaagccaat gaatttcag 420
159 atgtaaactg tgaagtagtt gcagtttcag tggattccca cttcagtcac cttgcctgga 480
161 tcaacacacc aagaaagaat ggtggtttgg gccacatgaa catcacactg ttgtcggata 540
163 taactaagca gatatccga gactacggag tgctgttgga aagtgtggc attgcactca 600
165 gaggtctctt cattattgac cctaattggt tcgtcaagca cctgagtgac aacgaccttc 660
167 cgggtgggccc cagtgtggaa gaaacactcc gtttggtaaa ggcgttccag tttgtagaga 720
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171 caacagcttc caaagagtac tttgagaagg tccatcagta ggccatccta tgtctgcaat      840
173 tacctgaagc ttttcaggcc aaaaaagagc cccagctgga atccttccaa tgccttgaag      900
175 attatttata gaatggcaaa acctcattat gtttgtgttt ataagtactg ctccacaggc      960
177 tttgtaattc taagacagggt tcaggctctc taaagggtggc tagctgcttc catagctgcc    1020
179 cttactaggg acttcttggg ggctaaccaa ttctccccga gtgctttgcc cccatttctt    1080
181 ggatcatgtc cttagagggt aagcattctt tcccttagcc tgccctgaac cttggtctac    1140
183 agtgaagtag cacatagtgc cagtacttgg tgaaatgaag tagcacatag caccagcact    1200
185 taatggaagc ttctgatcaa ggtcctaaaa ttctctcttg aatttttgtg aattatgctg    1260
187 aatttccctt tttttttttt taaacagtgt ccttgtgtgt tctgagggtat tgaagaggta    1320
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195 <211> LENGTH: 256
196 <212> TYPE: PRT
197 <213> ORGANISM: Homo sapiens
199 <400> SEQUENCE: 4
201 Met Ala Ala Val Gly Arg Leu Leu Arg Ala Ser Val Ala Arg His
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205 Val Ser Ala Ile Pro Trp Gly Ile Ser Ala Thr Ala Ala Leu Arg Pro
206 20 25 30
209 Ala Ala Cys Gly Arg Thr Ser Leu Thr Asn Leu Leu Cys Ser Gly Ser
210 35 40 45
213 Ser Gln Ala Lys Leu Phe Ser Thr Ser Ser Ser Cys His Ala Pro Ala
214 50 55 60
217 Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn Gly
218 65 70 75 80
221 Glu Phe Lys Asp Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu Val
222 85 90 95
225 Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile
226 100 105 110
229 Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys Glu
230 115 120 125
233 Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp Ile
234 130 135 140
237 Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Ala Leu
238 145 150 155 160
241 Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu Leu
242 165 170 175
245 Glu Gly Ser Gly Leu Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro Asn
246 180 185 190
249 Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg Ser
250 195 200 205
253 Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Tyr Val Glu Thr
254 210 215 220
257 His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Asp Ser Pro Thr Ile
258 225 230 235 240
261 Lys Pro Ser Pro Ala Ala Ser Lys Glu Tyr Phe Gln Lys Val Asn Gln
262 245 250 255
265 <210> SEQ ID NO: 5

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266 <211> LENGTH: 257
267 <212> TYPE: PRT
268 <213> ORGANISM: Rattus norvegicus
270 <400> SEQUENCE: 5
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273 1 5 10 15
276 Ala Ser Thr Ile Phe Arg Ser Ile Ser Ala Ser Thr Val Leu Arg Pro
277 20 25 30
280 Val Ala Ser Arg Arg Thr Cys Leu Thr Asp Met Leu Trp Ser Ala Cys
281 35 40 45
284 Pro Gln Ala Lys Phe Ala Phe Ser Thr Ser Ser Ser Phe His Thr Pro
285 50 55 60
288 Ala Val Thr Gln His Ala Pro His Phe Lys Gly Thr Ala Val Val Asn
289 65 70 75 80
292 Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu
293 85 90 95
296 Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu
297 100 105 110
300 Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys
301 115 120 125
304 Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp
305 130 135 140
308 Ile Asn Thr Pro Ala Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr
309 145 150 155 160
312 Leu Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu
313 165 170 175
316 Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro
317 180 185 190
320 Asn Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg
321 195 200 205
324 Ser Val Glu Glu Pro Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu
325 210 215 220
328 Thr His Gly Glu Val Cys Pro Pro Asn Trp Thr Pro Glu Ser Pro Thr
329 225 230 235 240
332 Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His
333 245 250 255
336 Gln
340 <210> SEQ ID NO: 6
341 <211> LENGTH: 257
342 <212> TYPE: PRT
343 <213> ORGANISM: Mus sp.
345 <400> SEQUENCE: 6
347 Met Ala Ala Ala Ala Gly Arg Leu Leu Trp Ser Ser Val Ala Arg His
348 1 5 10 15
351 Ala Ser Ala Ile Ser Arg Ser Ile Ser Ala Ser Thr Val Leu Arg Pro
352 20 25 30
355 Val Ala Ser Arg Arg Thr Cys Leu Thr Asp Ile Leu Trp Ser Ala Ser
356 35 40 45
359 Ala Gln Gly Leu Ser Ala Phe Ser Thr Ser Ser Ser Phe His Thr Pro

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363 Ala Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn
364 65      70      75      80
367 Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu
368      85      90      95
371 Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu
372      100      105      110
375 Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys
376      115      120      125
379 Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp
380      130      135      140
383 Ile Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr
384 145      150      155      160
387 Leu Leu Ser Asp Ile Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu
388      165      170      175
391 Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro
392      180      185      190
395 Asn Gly Val Val Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg
396      195      200      205
399 Ser Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu
400      210      215      220
403 Thr His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Glu Ser Pro Thr
404 225      230      235      240
407 Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His
408      245      250      255

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411 Gln

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417 &lt;212&gt; TYPE: DNA

418 &lt;213&gt; ORGANISM: Artificial Sequence

420 &lt;220&gt; FEATURE:

421 &lt;223&gt; OTHER INFORMATION: Forward Primer

423 &lt;400&gt; SEQUENCE: 7

424 tgcagtttca gtggattccc a

21

427 &lt;210&gt; SEQ ID NO: 8

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429 &lt;212&gt; TYPE: DNA

430 &lt;213&gt; ORGANISM: Artificial Sequence

432 &lt;220&gt; FEATURE:

433 &lt;223&gt; OTHER INFORMATION: Reverse Primer

435 &lt;400&gt; SEQUENCE: 8

436 ttcatgtggc ccaaacca

18

439 &lt;210&gt; SEQ ID NO: 9

440 &lt;211&gt; LENGTH: 28

441 &lt;212&gt; TYPE: DNA

442 &lt;213&gt; ORGANISM: Artificial Sequence

444 &lt;220&gt; FEATURE:

445 &lt;223&gt; OTHER INFORMATION: Probe

447 &lt;400&gt; SEQUENCE: 9

**VERIFICATION SUMMARY**

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